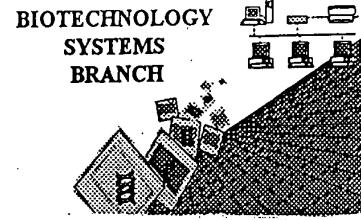


M. Wall CKA



#28
29

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/424,686D
Source: 1600
Date Processed by STIC: 3/19/03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



Does Not Comply
Information Needed

1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

4 <110> APPLICANT: Hagen, Gustav
5 Siegmund, Hans-Ulrich
6 Weichel, Walter
7 Wick, Maresa
8 Zubov, Dmitry
10 <120> TITLE OF INVENTION: Human Catalytic Telomerase Sub-Unit and its Diagnostic and
11 Therapeutic Use
13 <130> FILE REFERENCE: Bayer 10,203
15 <140> CURRENT APPLICATION NUMBER: US 09/424,686D
17 <141> CURRENT FILING DATE: 1999-11-29
19 <150> PRIOR APPLICATION NUMBER: PCT/EP98/03468
21 <151> PRIOR FILING DATE: 1998-06-09
E--> 23 <160> NUMBER OF SEQ ID NOS: (7) - found 12
25 <170> SOFTWARE: Microsoft Word

ERRORED SEQUENCES

27 <210> SEQ ID NO: 1 - counted 3470
28 <211> LENGTH: 4042
29 <212> TYPE: DNA
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37 aggtgctgcc gctggccacg ttctgtcgcc gcctggggcc ccagggtctgg cggctgggtgc 180
39 agcgcgggga cccggcggt ttccgcgcgc tggtgccca gtgcctgtgt tgctgtccct 240
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45 gcttcgcgtc gctggacggg gcccgggggg gccccccca ggccttcacc accagcgtgc 420
47 gcagctaccc gcccaacacg gtgaccgcacg cactgcgggg gacggggcg tggggctgc 480
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

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Output Set: N:\CRF4\03192003\I424686D.raw

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151 <211> LENGTH: 1132

152 <212> TYPE: PRT

153 <213> ORGANISM: Homo sapiens

E--> 155 <210> SEQ ID NO: 2 — missing (mandatory)

E--> 155 <400> SEQUENCE: 2

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159	His	Tyr	Arg	Glu	Val	Leu	Pro	Leu	Ala	Thr	Phe	Val	Arg	Arg	Leu	Gly
160					20				25				30			
162	Pro	Gln	Gly	Trp	Arg	Leu	Val	Gln	Arg	Gly	Asp	Pro	Ala	Ala	Phe	Arg
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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 166 50 55 60
 168 Pro Pro Ala Ala Pro Ser Phe Arg Gln Val Ser Cys Leu Lys Glu Leu
 169 65 70 75 80
 171 Val Ala Arg Val Leu Gln Arg Leu Cys Glu Arg Gly Ala Lys Asn Val
 172 85 90 95
 174 Leu Ala Phe Gly Phe Ala Leu Leu Asp Gly Ala Arg Gly Pro Pro
 175 100 105 110
 177 Glu Ala Phe Thr Thr Ser Val Arg Ser Tyr Leu Pro Asn Thr Val Thr
 178 115 120 125
 180 Asp Ala Leu Arg Gly Ser Gly Ala Trp Gly Leu Leu Leu Arg Arg Val
 181 130 135 140
 183 Gly Asp Asp Val Leu Val His Leu Leu Ala Arg Cys Ala Leu Phe Val
 184 145 150 155 160
 186 Leu Val Ala Pro Ser Cys Ala Tyr Gln Val Cys Gly Pro Pro Leu Tyr
 187 165 170 175
 189 Gln Leu Gly Ala Ala Thr Gln Ala Arg Pro Pro His Ala Ser Gly
 190 180 185 190
 192 Pro Arg Arg Arg Leu Gly Cys Glu Arg Ala Trp Asn His Ser Val Arg
 193 195 200 205
 195 Glu Ala Gly Val Pro Leu Gly Leu Pro Ala Pro Gly Ala Arg Arg Arg
 196 210 215 220
 198 Gly Gly Ser Ala Ser Arg Ser Leu Pro Leu Pro Lys Arg Pro Arg Arg
 199 225 230 235 240
 201 Gly Ala Ala Pro Glu Pro Glu Arg Thr Pro Val Gly Gln Gly Ser Trp
 202 245 250 255
 204 Ala His Pro Gly Arg Thr Arg Gly Pro Ser Asp Arg Gly Phe Cys Val
 205 260 265 270
 207 Val Ser Pro Ala Arg Pro Ala Glu Glu Ala Thr Ser Leu Glu Gly Ala
 208 275 280 285
 210 Leu Ser Gly Thr Arg His Ser His Pro Ser Val Gly Arg Gln His His
 211 290 295 300
 213 Ala Gly Pro Pro Ser Thr Ser Arg Pro Pro Arg Pro Trp Asp Thr Pro
 214 305 310 315 320
 216 Cys Pro Pro Val Tyr Ala Glu Thr Lys His Phe Leu Tyr Ser Ser Gly
 217 325 330 335
 219 Asp Lys Glu Gln Leu Arg Pro Ser Phe Leu Leu Ser Ser Leu Arg Pro
 220 340 345 350
 222 Ser Leu Thr Gly Ala Arg Arg Leu Val Glu Thr Ile Phe Leu Gly Ser
 223 355 360 365
 225 Arg Pro Trp Met Pro Gly Thr Pro Arg Arg Leu Pro Arg Leu Pro Gln
 226 370 375 380
 228 Arg Tyr Trp Gln Met Arg Pro Leu Phe Leu Glu Leu Leu Gly Asn His
 229 385 390 395 400
 231 Ala Gln Cys Pro Tyr Gly Val Leu Leu Lys Thr His Cys Pro Leu Arg
 232 405 410 415
 234 Ala Ala Val Thr Pro Ala Ala Gly Val Cys Ala Arg Glu Lys Pro Gln
 235 420 425 430
 237 Gly Ser Val Ala Ala Pro Glu Glu Asp Thr Asp Pro Arg Arg Leu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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240	Val Gln Leu Leu Arg Gln His Ser Ser Pro Trp Gln Val Tyr Gly Phe			
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243	Val Arg Ala Cys Leu Arg Arg Leu Val Pro Pro Gly Leu Trp Gly Ser			
244	465	470	475	480
246	Arg His Asn Glu Arg Arg Phe Leu Arg Asn Thr Lys Lys Phe Ile Ser			
247	485	490	495	
249	Leu Gly Lys His Ala Lys Leu Ser Leu Gln Glu Leu Thr Trp Lys Met			
250	500	505	510	
252	Ser Val Arg Asp Cys Ala Trp Leu Arg Arg Ser Pro Gly Val Gly Cys			
253	515	520	525	
255	Val Pro Ala Ala Glu His Arg Leu Arg Glu Glu Ile Leu Ala Lys Phe			
256	530	535	540	
258	Leu His Trp Leu Met Ser Val Tyr Val Val Glu Leu Leu Arg Ser Phe			
259	545	550	555	560
261	Phe Tyr Val Thr Glu Thr Phe Gln Lys Asn Arg Leu Phe Phe Tyr			
262	565	570	575	
264	Arg Lys Ser Val Trp Ser Lys Leu Gln Ser Ile Gly Ile Arg Gln His			
265	580	585	590	
267	Leu Lys Arg Val Gln Leu Arg Glu Leu Ser Glu Ala Glu Val Arg Gln			
268	595	600	605	
270	His Arg Glu Ala Arg Pro Ala Leu Leu Thr Ser Arg Leu Arg Phe Ile			
271	610	615	620	
273	Pro Lys Pro Asp Gly Leu Arg Pro Ile Val Asn Met Asp Tyr Val Val			
274	625	630	635	640
276	Gly Ala Arg Thr Phe Arg Arg Glu Lys Arg Ala Glu Arg Leu Thr Ser			
277	645	650	655	
279	Arg Val Lys Ala Leu Phe Ser Val Leu Asn Tyr Glu Arg Ala Arg Arg			
280	660	665	670	
282	Pro Gly Leu Leu Gly Ala Ser Val Leu Gly Leu Asp Asp Ile His Arg			
283	675	680	685	
285	Ala Trp Arg Thr Phe Val Leu Arg Val Arg Ala Gln Asp Pro Pro Pro			
286	690	695	700	
288	Glu Leu Tyr Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp Thr Ile			
289	705	710	715	720
291	Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys Pro Gln			
292	725	730	735	
294	Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala Ala His			
295	740	745	750	
297	Gly His Val Arg Lys Ala Phe Lys Ser His Val Ser Thr Leu Thr Asp			
298	755	760	765	
300	Leu Gln Pro Tyr Met Arg Gln Phe Val Ala His Leu Gln Glu Thr Ser			
301	770	775	780	
303	Pro Leu Arg Asp Ala Val Val Ile Glu Gln Ser Ser Ser Leu Asn Glu			
304	785	790	795	800
306	Ala Ser Ser Gly Leu Phe Asp Val Phe Leu Arg Phe Met Cys His His			
307	805	810	815	
309	Ala Val Arg Ile Arg Gly Lys Ser Tyr Val Gln Cys Gln Gly Ile Pro			
310	820	825	830	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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 316 850 855 860
 318 Arg Leu Val Asp Asp Phe Leu Leu Val Thr Pro His Leu Thr His Ala
 319 865 870 875 880
 321 Lys Thr Phe Leu Arg Thr Leu Val Arg Gly Val Pro Glu.Tyr Gly Cys
 322 885 890 895
 324 Val Val Asn Leu Arg Lys Thr Val Val Asn Phe Pro Val Glu Asp Glu
 325 900 905 910
 327 Ala Leu Gly Gly Thr Ala Phe Val Gln Met Pro Ala His Gly Leu Phe
 328 915 920 925
 330 Pro Trp Cys Gly Leu Leu Asp Thr Arg Thr Leu Glu Val Gln Ser
 331 930 935 940
 333 Asp Tyr Ser Ser Tyr Ala Arg Thr Ser Ile Arg Ala Ser Leu Thr Phe
 334 945 950 955 960
 336 Asn Arg Gly Phe Lys Ala Gly Arg Asn Met Arg Arg Lys Leu Phe Gly
 337 965 970 975
 339 Val Leu Arg Leu Lys Cys His Ser Leu Phe Leu Asp Leu Gln Val Asn
 340 980 985 990
 342 Ser Leu Gln Thr Val Cys Thr Asn Ile Tyr Lys Ile Leu Leu Leu Gln
 343 995 1000 1005
 345 Ala Tyr Arg Phe His Ala Cys Val Leu Gln Leu Pro Phe His Gln Gln
 346 1010 1015 1020
 348 Val Trp Lys Asn Pro Thr Phe Phe Leu Arg Val Ile Ser Asp Thr Ala
 349 1025 1030 1035 1040
 351 Ser Leu Cys Tyr Ser Ile Leu Lys Ala Lys Asn Ala Gly Met Ser Leu
 352 1045 1050 1055
 354 Gly Ala Lys Gly Ala Ala Gly Pro Leu Pro Ser Glu Ala Val Gln Trp
 355 1060 1065 1070
 357 Leu Cys His Gln Ala Phe Leu Leu Lys Leu Thr Arg His Arg Val Thr
 358 1075 1080 1085
 360 Tyr Val Pro Leu Leu Gly Ser Leu Arg Thr Ala Gln Thr Gln Leu Ser
 361 1090 1095 1100
 363 Arg Lys Leu Pro Gly Thr Thr Leu Thr Ala Leu Glu Ala Ala Ala Asn
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 366 Pro Ala Leu Pro Ser Asp Phe Lys Thr Ile Leu Asp
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1272 <211> LENGTH: 4042

1273 <212> TYPE: DNA

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1276 <220> FEATURE:

W--> 1277 <221> NAME/KEY: Substitution

1278 <222> LOCATION: (1)..(4012)

1279 <223> OTHER INFORMATION: Nucleotide positions 1-3220 are identical with the same positions in

1280 SEQ ID NO: 1. Nucleotide positions 3819 to 4012 are identical to
1281 positions 3449 to 4042 in SEQ ID NO: 1.

found only 3470 in Seq. 1

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

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1331 cggaaacccatc ctcaggacc ctggccagg gtttgcgttgcgt gacacccatc ctcaccacgc 2760
1332 tgcggaaagac agtggtgaac ttcccttgcgttgcgt gtttgcgttgcgt gacacccatc ctcaccacgc 2820
1333 ttccatccatc ggcggcccttccatccatc ggttgcgttgcgt gacacccatc ctcaccacgc 2880

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/424,686D

DATE: 03/19/2003
TIME: 13:04:52

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

1334	tggaggtgca gagcgactac tccagctatg	cccgaggaccc catcagagcc agtctcacct	2940
1335	tcaaccgcgg cttcaaggct gggaggaaca	tgcgtcgcaa actctttggg gtcttgcggc	3000
1336	tgaagtgtca cagcctgttt ctggatttgc	aggtaacag cctccagacg gtgtgcacca	3060
1337	acatctacaa gatcctcctg ctgcaggcgt	acaggtttca cgcatgttg ctgcagctcc	3120
1338	catttcatca gcaagtttg aagaacccca	cattttctc ggcgtcatac tctgacacagg	3180
1339	cctccctctg ctactccatc ctgaaagcaca	agaacgcagg tatgtgcagg tgcctggcct	3240
1340	cagtggcagc agtgcctgcc tgctgggtt	agtgtgtca gagaactgagt. gaatctggc	3300
1341	ttaggaagt cttaccctt ttgcatacg	gaagtggtt aacccaacca ctgtcaggct	3360
1342	cgtctggccg ccctctctgt gggtagcag	agcacctgtat ggaaggggaca ggagctgtct	3420
1343	gggagctgcc atcctccca ccttgctctg	cctggggaaag cgctgggggg cctggctct	3480
1344	cctgtttgcc ccatgggtggg atttgggggg	cctggcctct cctgtttgcc ctgtgggtggg	3540
1345	attgggctgt ctcccgatcca tggacttag	ggcccttggt caaacccagg ccaagggttt	3600
1346	aggaggaggc caggccccagg ctacccacc	ccctctcaggaa gcagaggccg cgtatcacca	3660
1347	cgacagagcc cccgcgcgtc ctctgttcc	cagtacccgt cctctggccc tggacacttt	3720
1348	gtccagcatc agggagggtt ctgatccgtc	tgaaatttcaaa gccatgtcga acctgcggc	3780
1349	ctgagcttaa cagcttctac ttctgtttt	ttctgtgttggagaccct gagaaggacc	3840
1350	ctgggagctc tgggaattt gactgaccaa	agggtgtccc tgtacacagg cgaggaccct	3900
1351	gcacctggat gggggccct gtgggtcaaa	ttggggggag gtgtgtggg agtaaaaatac	3960
1352	tgaatataatg agtttttcag ttttggaaaaa	aaaaaaaaaaaa aaaaaaaaaaa aa	4012

E--> 1357 (25)
E--> 1361 (25) - delete

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/424,686D
DATE: 03/19/2003
TIME: 13:04:53

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\03192003\I424686D.raw

L:147 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:3470 SEQ:1
L:147 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4042 Found:3470 SEQ:1
L:155 M:282 E: Numeric Field Identifier Missing, <210> is required.
L:155 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:1 differs:2
L:369 M:214 E: (33) Seq.# missing, SEQ ID NO:2
L:706 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:852 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:1000 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:1148 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11
L:1277 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:1357 M:254 E: No. of Bases conflict, this line has no nucleotides.
M:254 Repeated in SeqNo=12
L:1361 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4042 Found:4012 SEQ:12
L:23 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (7) Counted (12)